

Application Serial No. 10/788,487  
Submission with RCE filed November 25, 2009  
Reply to final Office Action mailed July 28, 2009

**REMARKS**

Claims 1, 3, 5, 6, 7, 9, 11, and 12 are pending and under consideration. Claims 1 and 7 have been amended. Support for the amendments to the claims may be found in the claims as filed originally, and at page 17, lines 7-24 of the specification. Reconsideration is requested based on the foregoing amendment and the following remarks.

**Response to Arguments:**

The Applicants appreciate the consideration given to their arguments, and the new grounds of rejection. Further favorable consideration is requested.

**Claim Rejections - 35 U.S.C. § 103:**

Claims 1, 3, 5, 6, 7, 9, 11, and 12 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 7,130,263 to Ong *et al.* (hereinafter "Ong") in view of US Patent Application Publication No. 6,751,189 to Gullicksen et al. (hereinafter "Gullicksen"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

The final clauses of claims 1 and 7 recite:

Adding the respective identifier of the transmission apparatus to concatenation setting information corresponding to the concatenation setting and sending the concatenation setting information with the respective identifier to another transmission apparatus by using available bits in an undefined region in an overhead of a signal transmitted over the ring network.

Neither Ong nor Gullicksen teaches, discloses, or suggests "adding the respective identifier of the transmission apparatus to concatenation setting information corresponding to the concatenation setting and sending the concatenation setting information with the respective identifier to another transmission apparatus by using available bits in an undefined region in an overhead of a signal transmitted over the ring network," as recited in claims 1 and 7.

The final Office Action acknowledges graciously in section 4, at page 4, that Ong is not "adding the respective identifier of the transmission apparatus to concatenation setting information and sending the concatenation setting information with the respective identifier to another transmission apparatus," and attempts to compensate for this deficiency of Ong by combining Ong with Gullicksen.

Gullicksen, however, is not "adding the respective identifier of the transmission apparatus to concatenation setting information corresponding to the concatenation setting and sending the

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concatenation setting information with the respective identifier to another transmission apparatus by using available bits in an undefined region in an overhead of a signal transmitted over the ring network" either, and thus cannot make up for the deficiencies of Ong with respect to either claim 1 or claim 7 in any case. The CSDP config message in Gullicksen, rather, is transmitted over the working line 1329W of the ring 1300 within the SONET protocol's Data Communication Channel, not "by using available bits in an undefined region in an overhead of a signal transmitted over the ring network," as recited in claims 1 and 7. In particular, as described at column 8, lines 65, 66, and 67, continuing at column 9, line 1:

In one embodiment, CSDP messages, such as the CSDP config message, are transmitted over the working line 1329W of the ring 1300 within the SONET protocol's Data Communication Channel ("DCC").

Since the CSDP config message in Gullicksen is transmitted over the working line 1329W of the ring 1300 within the SONET protocol's Data Communication Channel, Gullicksen is not "adding the respective identifier of the transmission apparatus to concatenation setting information corresponding to the concatenation setting and sending the concatenation setting information with the respective identifier to another transmission apparatus by using available bits in an undefined region in an overhead of a signal transmitted over the ring network" either, and thus cannot make up for the deficiencies of Ong with respect to either claim 1 or claim 7.

The final Office Action, in any case, asserts in the third full paragraph at page 4 that:

In view of this, it would have been obvious to one skilled in the art to modify Ong's apparatus with Gullicksen's teaching of adding the identifier to concatenation setting information and sending this information, for the purpose of allowing each node to update its table to accurately reflect the current characteristics of the ring in which the node is connected.

Ong, to the contrary, teaches away from adding the identifier to concatenation setting information and sending this information, because Ong notes that such distributed schemes, in which the nodes of the ring intercommunicate, are not robust in that they do not take into account span failures and how to handle partially built rings. In particular, as described at column 4, lines 27-33:

In contrast to the centralized scheme, in a distributed scheme, the nodes of the ring intercommunicate to generate and distribute the ring map and squelch tables. While techniques for distributively generating a ring map and a squelch table for a ring are known, these techniques are not robust in that they do not take into account span failures and how to handle partially built rings.

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It is submitted, therefore, that persons of ordinary skill in the art at the time the invention was made would not have been motivated to modify Ong as proposed in the final Office Action, since Ong warns that such distributed schemes are not robust.

The final clauses of claims 1 and 7 recites further:

Wherein the concatenation setting information is for connecting basic unit signals transmitted over the ring network.

Neither Ong nor Gullicksen teaches, discloses, or suggests "the concatenation setting information is for connecting basic unit signals transmitted over the ring network," as recited in claims 1 and 7. The connection configuration of Ong, rather, identifies the usage of smaller sized components on a set of channels or for one or more STSs. In particular, as described at column 7, lines 38-45:

A connection configuration identifies the usage of components on a set of channels. Thus, while a connection configuration typically includes the STS concatenation configuration for the set of channels, it is not limited to this size of components (STS and concatenated STS). For example, a connection configuration can also identify the usage of smaller sized components (e.g., VT and VT concatenations) for one or more STSs.

Since the connection configuration of Ong identifies the usage of smaller sized components on a set of channels or for one or more STSs, Ong does not disclose "the concatenation setting information is for connecting basic unit signals transmitted over the ring network," as recited in claims 1 and 7.

Thus, even if Ong and Gullicksen were combined as proposed in the final Office Action, neither of claims 1 or 7 would result. Claims 1 and 7 are submitted to be allowable. Withdrawal of the rejection of claims 1 and 7 is earnestly solicited.

Claims 3, 5, 6, 9, 11, and 12 depend from claim 1 or claim 7 and add further distinguishing elements. Claims 3, 5, 6, 9, 11, and 12 are thus also submitted to be allowable. Withdrawal of the rejection of claims 3, 5, 6, 9, 11, and 12 is earnestly solicited.

### **Conclusion:**

Accordingly, in view of the reasons given above, it is submitted that all of claims 1, 3, 5, 6, 7, 9, 11, and 12 are allowable over the cited references. Allowance of all claims 1, 3, 5, 6, 7, 9, 11, and 12 and of this entire application is therefore respectfully requested.

Finally, if there are any formal matters remaining after this response, the Examiner is invited to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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